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09/736,341	12/15/2000	Michihiro Izumi	35.G2696	8630

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EXAMINER

NGUYEN, NAM V

ART UNIT PAPER NUMBER

2635

DATE MAILED: 06/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/736,341

Applicant(s)

IZUMI, MICHIIRO

Examiner

Nam V Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

The application of Izumi for a "communication apparatus having wired communication function and wireless communication function, and control method therefor" filed December 15, 2000 has been examined.

This application claims foreign priority based on the application 360343/1999 filed December 20, 1999 in Japan. Receipt is acknowledged of papers submitted under 35 U.S.C 119(a) – (d), which papers have been placed of record in the file.

Claims 1-16 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2^{and 15} are rejected under 35 U.S.C. 102(b) as being anticipated by Hayashi (US# 5,479,485).

Referring to claims 1 and 15, Hayashi discloses a facsimile apparatus comprising cordless telephone set as recited in claim 1. See Figures 1-2 and respective portions of the apparatus and method.

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Hayashi discloses a method and a communication apparatus (1) (i.e. a facsimile apparatus) having a wired communication function (4) (i.e. a facsimile communication portion) and a wireless communication function (5) (i.e. a remote unit base station for cordless phone) (column 1 lines 53 to column 2 lines 11; see Figure 1), comprising:

Determining means (9) (i.e. control CPU) for determining whether connection is made to a wired communication line (8) (i.e. a fax modem) (column 3 lines 1 to 9; see Figure 2); and

Control means (17) (i.e. speech synthesis) for selectively controlling, in accordance with the determination by said determining means (9), whether to transmit data from said communication apparatus (1) through one of the wired communication line (8) and a wireless communication link (5) (i.e. a base unit for cordless phone to a remote unit 3) (column 3 lines 10 to column 4 line 8; see Figures 3-4).

Referring to claim 2, Hayashi discloses a communication apparatus according to claim 1, wherein said determining means (9) performs the determination based on whether synchronization with one of layer 1 (column 3 lines 1 to 28; column 6 lines 19 to 25) and layer 2 of the wired communication line (8) can be established (column 6 lines 26 to 53; see Figure 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4, 6, 11-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US# 5,479,485) in view of Charbonnier et al. (US# 5,684,608).

Referring to claims 3 and 16, Hayashi discloses a method and a communication apparatus, to the extent as claimed with respect to claim 1 above, however, Hayashi did not explicitly disclose a communication apparatus having a first mode for performing wireless communication under the control of a first wireless communication apparatus and a second mode for controlling so that a second wireless communication apparatus performs wireless communication.

In the same field of endeavor of radio link and wired communication system, Charbonnier et al. teach that communication apparatus (9) (i.e. a cordless facsimile machine) having a first mode (i.e. a handset mode) for performing wireless communication under the control of a first wireless communication apparatus (3) (i.e. the routing unit) and a second mode (i.e. a base mode) for controlling so that a second wireless communication apparatus (12) performs wireless communication (column 2 lines 14 to 44; see Figure 1-3) in order exhibits numerous advantages in installation of the system.

One of ordinary skilled in the art recognizes the need to have a facsimile and cordless phone system has a reversible nature or mode or dual mode of Charbonnier et al. in the automatic switching function of telephone or facsimile apparatus of Hayashi because Hayashi suggests it is desired to provide that facsimile apparatus has dual functions to connect to a facsimile communication portion or to communicate with the wireless telephone headset (column 6 lines

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19 to 54; see Figures 2 and 5) and Charbonnier et al. teach that a cordless communication facsimile system has communicate in handset mode or in base mode (column 1 lines 36 to 48; column 2 lines 20 to 49; see Figures 1-3) in order to have great flexibility. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to have a facsimile and cordless phone system has a reversible nature or mode or dual mode of Charbonnier et al. in the automatic switching function of telephone or facsimile apparatus of Hayashi with the motivation for doing so would have been to provide a facsimile apparatus comprising cordless telephone set with dual modes in order to have very great flexibility.

Referring to claim 4, Hayashi in view of Charbonnier et al. disclose a communication apparatus according to claim 3, Hayashi discloses wherein said determining means (9) performs the determination based on whether synchronization with one of layer 1 (column 3 lines 1 to 28; column 6 lines 19 to 25) and layer 2 of the wired communication line (8) can be established (column 6 lines 26 to 53; see Figure 5).

Referring to claim 6, Hayashi in view of Charbonnier et al. disclose a communication apparatus according to claim 3, Hayashi discloses wherein said determining means (9) performs the determination when power (42) is supplied to said communication apparatus (1) (column 4 lines 44 to 50).

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Referring to claim 11, Hayashi in view of Charbonnier et al. disclose a communication apparatus according to claim 3, Charbonnier et al. disclose wherein the first mode (i.e. handset mode) is a mode in which communication through the wired communication line is performed through the first wireless communication apparatus (3) (column 2 lines 28 to 35; see Figure 3); and

The second mode (i.e. a base mode) is a mode in which relaying the processing (14) (i.e. a switch) is performed to enable the second wireless communication apparatus (12) (i.e. cordless telephone instrument) to perform communication through the wired communication line (10) (column 2 lines 14 to 27; lines 36 to 58; see Figure 2).

Referring to claim 12, Hayashi in view of Charbonnier et al. disclose a communication apparatus according to claim 3, Hayashi discloses wherein said control means (17) converts, in accordance with the switched mode, a received digital signal (i.e. a rectangular wave signal) into one of a digital signal using another encoding system (i.e. CPU) and an analog signal (column 1 lines 20 to 30).

Referring to claim 13, Hayashi in view of Charbonnier et al. disclose a communication apparatus according to claim 3, Hayashi discloses wherein said communication apparatus (1) performs digital wireless communication and digital wired communication (column 1 lines 20 to 30).

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Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US# 5,479,485) in view of Charbonnier et al. (US# 5,479,485) as applied to claim 3 above, and in view of Dacus et al. (US# 6,223,061).

Referring to claim 5, Hayashi in view of Charbonnier et al. disclose a communication apparatus according to claim 3, however, Hayashi in view of Charbonnier et al. did not explicitly disclose further comprising: generating means for generating a clock for performing communication through a wireless communication link;

Wherein said control means controls, in accordance with the determination by said determining means, to perform one of communication in accordance with a clock extracted from the wired communication line and communication in accordance with the clock generated by said generating means

In the same field of endeavor of radio communication system, Dacus et al. teach that generating means (46) (i.e. XCO) for generating a clock for performing communication through a wireless communication link (38) (column 7 lines 48 to column 8 lines 54; see Figure 2);

Wherein said control means (5) (i.e. frequency control input) controls, in accordance with the determination by said determining means (10) (i.e. detector), to perform one of communication in accordance with a clock extracted from the wired communication line and communication in accordance with the clock generated by said generating means (46) (column 7 lines 48 to column 8 lines 54; see Figures 2-4) in order to obtain the best transmission strategy for transmitting a communication signal.

One of ordinary skilled in the art recognizes the need to add a TXCO to generate a clock that has very high accurate frequency control output in the frequency synthesizing means of Dacus et al. in the internal clock of CPU of the base unit of Hayashi in view of Charbonnier et al. because Hayashi suggests it is desired to provide that CPU controls base unit according to a control signal provided via a modem (column 4 lines 23 to 27; see Figure 2) and Dacus et al. teach that a TXCO connect to a phase detector to generate an output signal which drives transmitting antenna (column 8 lines 34 to 54; see Figures 2-4) in order to have a reliable transmitting signal. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to add a TXCO to generate a clock that has very high accurate frequency control output in the frequency synthesizing means of Dacus et al. in the internal clock of CPU of the base unit of Hayashi in view of Charbonnier et al. with the motivation for doing so would have been to provide a capacity to set the range of frequencies by the microprocessor in order to have a highly accurate frequency output.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US# 5,479,485) in view of Charbonnier et al. (US# 5,479,485) as applied to claim 3 above, and in view of Allmond et al. (US# 6,072,803).

Referring to claims 7-8, Hayashi in view of Charbonnier et al. disclose a communication apparatus according to claim 3, however, Hayashi in view of Charbonnier et al. did not explicitly disclose wherein said determining means continuously or periodically performs the determination.

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In the same field of endeavor of radio communication system, Allmond et al. teach that determining means (402) continuously or periodically performs the determination (column 15 line 66 to column 16 line 62; see Figures 4 and 6) in order to monitor the corresponding link signals until the corresponding link signal indicates that link pulses are detected.

At the time the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need to add that the processor continuously or periodically perform the determination of Allmond et al. in the control CPU of Hayashi in view of Charbonnier et al. because continuously or periodically performs the determination would improve the reliable communication and accurate connection of the communication signal that has been shown to be desirable in the facsimile apparatus of Hayashi in view of Charbonnier et al..

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US# 5,479,485) in view of Charbonnier et al. (US# 5,479,485) as applied to claim 3 above, and in view of Yamashita (US# 5,517,552).

Referring to claims 9 and 10, Hayashi in view of Charbonnier et al. disclose a communication apparatus according to claim 3, however, Hayashi in view of Charbonnier et al. did not explicitly disclose wherein said control means controls so as to perform display in accordance with the determination by said determination means and wherein said control means so as to display whether to perform one of the communication in the first mode and the communication in the second mode.

In the same field of endeavor of facsimile apparatus with cordless phone system, Yamashita teaches that control means (11) (i.e. operational portion) controls so as to perform

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display (11a) (i.e. a liquid crystal display) in accordance with the determination by said determination means (6) (i.e. CPU) and to display whether to perform one of the communication in the first mode (i.e. facsimile transmission operation mode) and the communication in the second mode (i.e. operation in response to telephone call by cordless phone) (column 4 lines 12 to 37; column 8 lines 12 to 30; column 8 line 55 to column 9 line 15; see Figure 2) in order to inform the user the status of the communication until the communication has finished.

At the time the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need to add control means to perform display and to display the cordless phone is currently used of Yamashita in the control CPU of Hayashi because adding the control means to perform display to inform the user of that the communication status would improve the communication between the user and the status of the facsimile apparatus that has been shown to be desirable in the facsimile apparatus with cordless phone of Hayashi in view of Charbonnier et al.

Allowable Subject Matter

Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Referring to claim 14, the following is a statement of reasons for the indication of allowable subject matter: the prior art fail to suggest limitations that a communication apparatus further comprising:

A digital/digital code converter for performing digital/digital code conversion of data received from a digital wireless link and for performing digital/digital reverse code conversion of data received from the wired communication line;

An analog/digital converter for performing digital/analog conversion of the data received from the digital wireless link and for performing analog/digital conversion of data output from a data processor for processing communication data; and

A selector switch for switching to interconnect the digital/digital code converter and the wired communication line when said communication apparatus and the wired communication line are connected to each other or to interconnect the digital/digital code converter and the analog/digital converter when said communication apparatus and the wired communication line are not connected to each other.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Beukema et al. (US# 6,128,510) disclose a cordless connection for a data/fax modem.

Velooso (US# 6,122,508) discloses a mobile radio system with wireline subscriber lines.

Koohgoli et al. (US# 6,091,968) disclose a call switching system based on type of call.

Ehreth (US# 5,982,854) discloses a fiber optic based subscriber terminal.

Sawai et al. (US# 5,802,471) disclose a mobile communication system, automatic all receiving method, and mobile station.

Steinbeck et al. (US# 4,752,949) disclose a corded/cordless telephone.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 703-305-3867. The examiner can normally be reached on Mon-Fri, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Nam Nguyen
June 20, 2003

PN

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